

Biopuncture and the Treatment of Sports Injuries

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“Biopuncture” is the term used to describe the injection of biotherapeutics in specific spots or areas. Biotherapeutics such as Traumeel, Lymphomyosot, Spascupreel, and Zeel contain low doses of natural ingredients, and the ampoule forms are specially designed for injection. In general, these products are injected either subcutaneously or into muscles, tendons, or ligaments.

In general, Traumeel is injected for acute inflammation and Zeel for chronic joint pain. Spascupreel is used in muscle spasms and Lymphomyosot for swelling and inflammation. Several of these products may be combined in a cocktail, and a local anesthetic such as procaine 1% or lidocaine 0.5% can also be added.

Subcutaneous injections

Subcutaneous (s.c.) injections are administered when deeper injections are impossible for technical or practical reasons. For example, instead of injecting medication into small joints such as the temporomandibular joint or finger joints, biopuncturists first start with subcutaneous injections into the pain zone. Subcutaneous injections may also be administered for sports injuries – for example, when cutaneous-muscular reflexes are used to influence deeper layers.

Fig. 1: Lateral band injury in the right ankle (basketball player)



Case study:

A basketball player (age 25) had been in pain for three days after injuring her right ankle during a club competition. She had difficulty walking and the ankle was swollen, especially laterally. An ultrasound showed signs of swelling and lateral band injury.

I suggested using local subcutaneous injections to stimulate healing. In each session, about 1.5 ml of a mixture of Traumeel (2 ml), Lymphomyosot (1 ml), and lidocaine 0.5% (3 ml) was administered by s.c. injection into each of four spots (Figure 1). She also applied Traumeel ointment to the ankle and took Traumeel tablets. After two sessions (one week apart), she noted about 80 percent improvement. She had no further trouble playing basketball.



Fig. 2: Arthritis in the right knee (tennis player)



Intramuscular injections

When treating athletes with minor orthopedic complaints, biopuncturists focus heavily on the muscular system. Patients may suffer from pain in affected muscles and complain about weakness in those muscles. During examination, certain areas or spots may be very tender on palpation. Such points are called *myofascial pain points* (MPPs). Some of these points (called *myofascial trigger points*, or MTPs, in biopuncture) also trigger pain elsewhere in the body. For example, a patient presenting with heel pain may be experiencing pain referred from MTPs in the calf muscle, so the injection will be administered into the calf muscle. Referred pain on the side of the leg may be due to MTPs in the gluteus minimus muscle. In biopuncture, these MPPs and MTPs are injected with Spascupreel, Traumeel, or Zeel.

Case study:

A tennis player (age 53) had pain in the right knee for six months. It was worse after playing tennis. X-rays revealed arthritis in both knees, especially on the right side; ultrasounds were normal. An NSAID prescribed by his doctor gave quick relief but had to be discontinued due to gastric pain.

During his initial visit, the patient pointed out the painful area (the right patellar region). On clinical examination, however, I discovered several trigger points in the right quadriceps muscle (above the area of pain) and injected a mixture of Zeel (2 ml), Spascupreel (1 ml), and procaine 1% (2 ml) into those MTPs at a depth of 1 to 2 cm. The patient received three injections at each of the weekly sessions (Figure 2). After the first session, he complained about increased pain and discomfort. I explained that this was simply a reaction phase; it meant that the medications had started to work. He experienced great improvement after three sessions and achieved complete and lasting relief after seven sessions.

Case study:

A woman (age 30) had experienced pain in the right groin for three months, especially while running (800 m). When NSAIDs didn't help, she decided to try biopuncture. Initially, I injected Traumeel (s.c.) into the pain zone on a weekly basis. When these local subcutaneous injections failed to produce results, I looked for myofascial trigger points (MTPs) and found several in the adductor longus muscle. These spots were injected with Traumeel at a depth of about 2 to 3 cm (Figure 3). The patient experienced more than 50 percent improvement after the first set of injections into the MTPs (without injecting the groin) and achieved permanent relief after three weekly sessions of injections into the same trigger points.

Fig. 3: Pain in the right groin (runner)

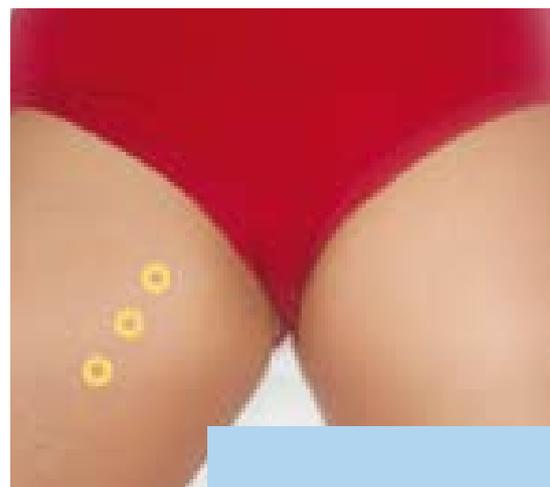


Fig. 4: Chronic neck pain after collision with another player (football/soccer player)



Injections into ligaments

Ligaments are often injured by trauma, especially when no bones are broken. Because the blood supply to ligaments is limited, recovery is usually slow; incomplete healing is not uncommon. Moreover, due to the fact that ligaments have many nerve endings, especially at their points of attachment to the periosteum, ligament damage is quite painful, and the damaged areas, called *ligamentous pain points* (LPPs), are tender when palpated. Again, referred pain may occur farther from the injury due to *ligamentous trigger points* (LTPs).

Local injections are administered into the painful spots, close to the attachment to the bone. Traumeel is the medication of choice; local anesthetics and hypertonic sugar water (glucose 20%) may be added.

Case study:

A 29-year-old professional football (soccer) player was experiencing chronic neck pain that had begun two years earlier when he collided with another player on the field. X-rays and CT scan were normal, but on clinical examination, palpation caused significant tenderness along the nuchal ligament on the midline of the neck. I injected four pain points (LPPs) with a mixture of Traumeel (2 ml), hypertonic sugar (2 ml of glucose 20%), and 2 ml lidocaine 1% on a weekly basis (Figure 4). After five weekly sessions, the patient was symptom-free.

Conclusion

Increasingly, sports medicine specialists are seeking alternatives to cortisone injections. Athletes are also becoming interested in medications that are safe and not on any banned substance lists. The time is right for physicians to discover the benefits of biopuncture, and workshops that include demonstrations of injection techniques on actual patients are a good introduction. Interested physicians are usually surprised and pleased to discover how easy and accessible this approach is and how safe and beneficial it can be for their athletes. ■

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